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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,126	10/27/2003	Maki Uchida	032739.0651	2482
25461	7590	05/25/2004	EXAMINER	
SMITH, GAMBRELL & RUSSELL, LLP SUITE 3100, PROMENADE II 1230 PEACHTREE STREET, N.E. ATLANTA, GA 30309-3592			RODEE, CHRISTOPHER D	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/694,126	UCHIDA, MAKI	
	Examiner	Art Unit	
	Christopher D RoDee	1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Non-elected claim 1 has been canceled.

### *Claim Rejections - 35 USC § 112*

Claims 9-12 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a process where the correlation of water contact angle and residual potential has been previously determined for a specific electrophotosensitive material, does not reasonably provide enablement for a method as presented where this correlation has not been previously performed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The instant claims have been amended to specify a step of "carrying out a heat treatment so that the water contact angle is set within a predetermined range". This water contact angle is then measured and a photosensitive layer is then formed on the intermediate layer "when the water contact angle is within a predetermined range which is defined as being not less than  $A^0$ , wherein  $A^0 = B^0 - 2^0$ ". The Examiner notes applicants' efforts to bring the claims in line with the specification disclosure. Although the claims now state that the water contact angle is within a predetermined range as a result of heat treatment, the claims do not specify how this predetermined range is obtained. It appears from applicants' comments in response page 8 that the correlation curve must be predetermined in order to give the predetermined water contact angle. Predetermining the correlation curve permits the artisan to define the water contact angle for a given combination of electrophotosensitive material layers (see spec.

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Examples). The claims do not specify that the correlation curve is the feature that is predetermined by experimentation in the manner discussed in the specification (e.g., spec. p. 24-26). The claims include the situation where the water contact angle predetermined range is chosen by means, methods or calculation before the electrophotosensitive material(s) is/are actually formed. As discussed in the last Office action, the specification provides no guidance of how to predetermine the intermediate layer water contact angle without actually determining the correlation curve by experimentation for a specific combination of layers (e.g., intermediate layer and photosensitive layer) in the material. Applicants appear to agree with this position noting the remarks in the response (p. 8, top). The claims include the situation where only the water contact angle is predetermined or where the correlation curve is determined without experimentation. None of these embodiments are supported by the specification as filed. See remarks in the last Office action as they remain applicable to the instant claims.

It appears that applicants' may be reading the predetermination of the correlation curve into specific claim language of a predetermined range of the water contact angle. Reading limitations not expressly defined in the specification is improper. The claims must fully define applicants' invention. Applicants may not rely on the specification to define their invention.

The rejection is proper as now presented for the amended claims.

Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims as now presented are indefinite because when the water contact angle is outside the predetermined range it appears that the photosensitive layer is not formed. See the claim language that states, "then forming a photosensitive layer on the surface of said

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intermediate layer, when the water contact angle is within a predetermined range..." (emphasis added). The other steps of the process would be carried out ("carrying out" and "measuring"), but the "forming" step would not be carried out. In this situation, the intended use of the process (i.e., for forming an electrophotosensitive material") would not be accomplished. It is unclear if the claims include the situation where the electrophotosensitive material is not produced. The Examiner suggests the word "when" be changed to "wherein" to remove the possibility the photosensitive layer is not formed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

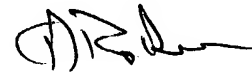
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6 to 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



cdr  
18 May 2004

CHRISTOPHER RODEE  
PRIMARY EXAMINER